

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings of claims in the application:

**Listing of Claims:**

1. (Currently Amended) A blood pressure and pulse rate system for deriving the blood pressure and pulse of a subject ~~that is in communication with an interface member,~~subject, said system comprising:  
  - a platform configured to accommodate a foot of the subject;
  - ~~an inflated~~ interface member configured:
    - to be presented to the foot of the subject,
    - to be maintained at a substantially constant pressure, wherein said interface member is configured and
    - to function when in indirect contact with the subject's body; ~~and~~
  - a sensor module in communication with said interface member, said sensor module ~~for detecting~~configured to detect a pulse wave form from the foot of the subject and pulse rate; a pulse rate of the subject when the foot of the subject is presented to the interface member and the interface member is maintained at the substantially constant pressure; and
  - a processor module ~~that analyzes~~configured to analyze the pulse wave form and pulse rate signal for deriving variants of blood pressure, and to derive a pulse pressure of the subject based on the analysis; and
  - an output module configured to output at least one of the pulse wave form, pulse rate and pulse pressure.
2. (Currently Amended) The system of claim 1, wherein said processor module is further configured to derive a variants of blood pressure includes at least one of pulse pressure, systolic pressure, diastolic pressure, pulse width, a pulse time difference, a double peak difference, and a depth of dicrotic notch;~~notch~~ for the subject based on the analysis.

3. (Canceled)
4. (Currently Amended) The system of ~~claim 3,~~claim 1, wherein said output module comprises at least one of display, alarm, memory storage, communication device, printer, buzzer, PDA, lap top computer, computer, audio and visual alarm, and light.
5. (Previously Presented) The system of claim 1, wherein said interface member is also configured to function when in direct contact with the subject's body.
6. (Currently Amended) The system of claim 1, wherein said sensor module is ~~directly or~~ indirectly coupled to the interface member.
7. (Currently Amended) The system of claim 1, wherein said sensor module and processor module are ~~in~~configured for wireless communication.
8. (Currently Amended) The system of claim 7, wherein said wireless communication comprises at least one of RF link, ~~an infrared, cellular phone link, optical and electromagnetic.~~ infrared link, cellular phone link, optical link and electromagnetic link.
9. (Currently Amended) The system of claim 1, wherein said sensor module and processor module are ~~in~~configured for hard wired communication.
10. (Previously Presented) The system of claim 9, wherein said hard wired communication comprises at least one of electronic, integrated circuit, electromagnetic, wire, cable, fiber optics, a phone line, twisted pair, and coaxial.
11. (Currently Amended) The system of claim 1, further comprising an archival storage module.

12. (Currently Amended) The system of claim 11, wherein said archival storage module ~~stores~~ is configured to store at least one of longitudinal analysis and pattern ~~recognition for diagnostic and other purposes.~~ recognition.

13. (Previously Presented) The system of claim 12, wherein said processor module performs at least one of longitudinal analysis and pattern recognition analysis.

14. (Currently Amended) The system of claim 12, further comprising: a second processor module, said second processor module ~~analyzes the variants of blood pressure,~~ configured to analyze the longitudinal analysis, and pattern recognition.

15-16. (Canceled)

17. (Currently Amended) The system of claim 1, ~~wherein~~ wherein said interface member is included in at least one of ~~platform, a scale, chair, a bath mat, mat, bed, a shoe, a slipper, door knob, handle, and a sandal.~~

18. (Previously Presented) The system of claim 1, wherein said sensor module comprises at least one of piezoelectric device, fiber optic device, differential transformer, and pressure determining device providing sufficient resolution to transduce the naturally occurring changes in physiology related to the subject of interest cardiac event.

19. (Currently Amended) The system of claim 18, wherein said sensor module is ~~directly or~~ indirectly coupled to the subject.

20. (Original) The system of claim 1, further comprising a control module for controlling said sensor module and processor module.

21. (Currently Amended ) The system of claim 1, wherein said sensor module is ~~directly or indirectly coupled to the subject.~~
22. (Currently Amended) A method for deriving the blood pressure and pulse of a subject ~~that is in communication with an interface member, subject,~~ said method comprising:  
detecting a pulse wave form and pulse ~~rate; and rate from a foot of the subject via an~~  
interface member, the foot of the subject presented to the interface member;  
analyzing the pulse wave form and pulse rate signal ~~for deriving variants of blood~~  
pressure; and deriving a pulse pressure of the subject based on the analysis; and  
outputting at least one of the pulse wave form, the pulse rate and the pulse pressure,  
wherein the interface member is inflated and maintained at a substantially constant pressure and is configured to function when in indirect contact with the subject's body.
23. (Currently Amended) The method of claim 22, ~~wherein said variants of blood pressure includes at least one of pulse pressure, systolic pressure, diastolic pressure, further comprising~~  
deriving a pulse width, a pulse time difference, a double peak difference, and a depth of dicrotic  
notch-notch for the subject based on the analysis.
24. (Canceled)
25. (Currently Amended) The method of ~~claim 24, claim 22,~~ wherein said outputting is provided by an output module.
26. (Previously Presented) The method of claim 25, wherein said output module comprises at least one of display, alarm, memory storage, communication device, printer, buzzer, PDA, lap top computer, computer, audio or visual alarm, and light.
27. (Currently Amended) The method of claim 22, further comprising: storing archival information ~~or data based on the pulse wave form, the pulse rate and the pulse pressure.~~

28. (Currently Amended) The method of claim 27, wherein the storing of archival information ~~or data~~ is provided by an archival storage module that stores at least one of longitudinal analysis and/or and pattern recognition for diagnostic and other purposes; recognition.

29. (Currently Amended) The method of ~~claim 28; claim 27,~~ further ~~comprises; comprising:~~ performing at least one of longitudinal analysis and pattern recognition analysis; analysis based on the archival information.

30-31. (Canceled)

32. (Currently Amended) A computer program product comprising computer usable medium having computer logic for enabling at lease one processor in a computer system to derive the blood pressure and pulse of a ~~subject that is in communication with an interface member; subject,~~ said computer logic ~~comprising; comprising instructions for;~~

detecting a pulse wave form and pulse rate; and rate from a foot of the subject via an interface member, the foot of the subject presented to the interface member;

analyzing the pulse wave form and pulse rate signal for deriving variants of blood pressure; and deriving a pulse pressure of the subject based on the analysis; and outputting at least one of the pulse wave form, the pulse rate and the pulse pressure.

wherein the interface member is inflated and maintained at a substantially constant pressure and is configured to function when in indirect contact with the subject's body.

33. (Previously Presented) The method of claim 22, wherein the interface member is also configured to function when in direct contact with the subject's body.

34. (Currently Amended) The ~~computer logic product~~ of claim 32, wherein the interface member is also configured to function when in direct contact with the subject's body.

35. (New) The method of claim 22, wherein said interface member is included in at least one of a scale, a bath mat, a shoe, a slipper, and a sandal.
36. (New) The product of claim 32, wherein said interface member is included in at least one of a scale, a bath mat, a shoe, a slipper, and a sandal.
37. (New) The system of claim 1, wherein said interface member is included in a scale, and the system is configured to detect the pulse wave form when the subject stands on the scale.
38. (New) The method of claim 22, wherein said interface member is included in a scale, and the detecting is performed while the subject stands on the scale.
39. (New) The product of claim 32, wherein said interface member is included in a scale, and the system is configured to detect the pulse wave form when the subject stands on the scale.
40. (New) The system of claim 1, wherein said interface member is included in at least one of a shoe, a slipper, and a sandal, and the system is configured to detect the pulse wave form when the subject wears the at least one of a shoe, a slipper, and a sandal.